1:Barnes E-5 (1946-1949)1954 FR5 Ngoni FR5
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423 society. This was not so among the Ngoni. We know little about the way in which rights in cultivated and grazing-lands, hunting-rights and rights to water were distributed in the old Ngoni State, but if the present position is any guide, it seems likely that there was no well-developed system of land-holding. After dwelling in
361 any one area for five years or so, the tribe moved on, partly because
[311] the fertility of the soil had been exhausted and partly for other reasons. Thus rights to land did not endure; land itself was expendable. What endured was merely the pattern of residential settlement, the arrangement of people in clusters and divisions and villages. Men and women lived where they belonged in the segmentary residential system, and relative geographical position did not determine, but was determined by, political affiliation.

557
631 Power in the State was thus power over people rather than over natural resources. It is true that cattle were valuable, but
231 even they appear to have been eaten rather more often than in many tribes in which cattle are a form of wealth and investment rather
[262] than a regular item of diet. Furthermore, there was the doctrine
[422] that all cattle belonged to the Paramount Chief, so that village
[643] headmen with cattle in their byres held them, as it were, only by favour of the chief. The principal index of power was the number
[668] of a man's dependants. Political struggles were essentially not struggles to control wealth but to enjoy the support of followers,
[727] The main source of dependants was from raiding, and hence the allocation of captives was crucial to the working of the social system.

727 Fraser writes of the northern Nyasaland Ngoni, that warriors kept their own captives.[1] This does not seem to have been the usual procedure among the Fort Jameson group. Although some informants spoke as if they, or their forebears, had been actually
[643] taken by the person who became their lord, others said that in general all captives belonged to the Paramount Chief, and that he could allocate them as he wished; usually, however, he allocated them to the warriors who had captured them. It was a specific privilege of regional governors to keep their own captives. It seems probable that the Paramount Chief's allocations were made to the heads of segments to which the warriors belonged, for many of my informants were said to have been captured by a few people, some of whom are described by contemporary travellers as generals and war-leaders, and who are unlikely to have made many front-line captures themselves. Moreover, it seems that on small raids
[721] organized by the head of a major segment, not on a national scale,

[1] Fraser, *Primitive people*, p. 37.

1:Barnes E-5 (1946-1949) 1954 FR5 Ngoni FR5
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villages fairly astonished me; and it was not till then that I realized what a powerful and prosperous people were those whose acquaintance I was about to make.'[137]

We may compare this description of conditions in 1896 with that given by Trapnell for the same area in 1938.

'. . . Reserve II presents an example of combined cutting-out, soil-deterioration and erosion which probably has no equal in the Territory. . . . Cattle are most numerous in this reserve, and . . . their added burden on the land has doubtless helped to weigh the scales to the point of erosion. With cattle and an excessive population in Mpezeni's and Maguya's country, surface compaction and deterioration of soil have come to give place to wholesale wash, and denuded belts of resting land are now to be seen seared by dongas fully ten feet deep. The enormous gullied scars down the face of Nyamfinsi and neighbouring hills provide notable examples of the effects of millet cultivation on impossible slopes.'[138]

The devastation described by Trapnell has come about in part on account of the alienation of land to Whites, but it is also due to the transition which the Ngoni have been forced to make from living as migrant brigands to working as subsistence cultivators and migrant labourers. Even without alienation, it is likely that the large villages would have disappeared.

The population of the tribe immediately prior to the conquest was estimated by Deare to be 40,000 and possibly more. Johnston, in his highly ambitious population density map, appears to have assumed a population of about 50,000, while an official estimate in 1898 was nearly 150,000.[139] The area of Mpezeni's country was estimated by Angus to be about 400 square miles. He also delimits an area of about 2,700 square miles which he describes as 'Angoni-land proper', but it is clear that this large area includes much waterless uninhabited country. Johnston implies, on his map, an inhabited area of 3,200 square miles, but again there is clear evidence that in fact much of this was uninhabited. In 1903 it was estimated that the area within which the Ngoni kept their cattle before the conquest was about 600 square miles.[140] Angus's lower estimate is in accord with the distances between villages given by travellers

[137] Angus, 'Northern Angoniland', p. 76.
[138] Trapnell, *Ecological Survey*, pp. 67, 71.
[139] Deare, 'Slave raiders', 11 May; *A & P*, 1894, lvii, p. 769; *B.C.A.G.*, v, 3 (26 February 1898), p. 1.
[140] Angus, 'Northern Angoniland', pp. 74, 78; *B.C.A.G.*, iii, 11 (1 June 1896), p. 1; *Reports on the Administration*, 1903, p. 19.

1:Barnes E-5 (1946-1949)1954 FR5 Ngoni FR5
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such as Sharpe, Thomson and Deare, and with my own information based on village histories. Combining this with the lowest estimate of population, we arrive at a population density of 100 persons to the square mile, while the highest estimate implies a density of 375. Highly unreliable as these figures are, it is clear that the density of population was considerably greater before the conquest than it is now, when it averages about 68 persons to the square mile. Even the present-day figure is nearly three times the density which the land can sustain in perpetuity.

This dense population was concentrated in large villages. Angus estimated that there were at least a thousand huts in Loangeni, while Deare estimated that there were sixteen hundred. Read states that it was over three miles across, while Genthe says that Ngoni villages were about five times the size of the average Cewa village. From the top of a mountain, Deare saw eleven villages all about the same size as Loangeni.[141] Thus it seems that there were several villages with populations of the order of three thousand. If Deare and Johnston are right in their estimates of tribal population the majority of the people lived in these big villages.

Yet by September 1898 the only villages left in Mpezeni's country were a few to the east of Fort Young. All the rest had been destroyed by troops, and their former inhabitants were said to be 'still timid' and living in scattered groups in grass shelters.[142] The large pre-conquest settlements were particularly vulnerable to attack by troops armed with guns and intent on burning, the more so because there were no defensive preparations at all. Glave wrote in 1894 that the Ngoni 'have no stockaded village, such protection they deem unnecessary as no enemy can be strong enough to attack them'.[143]

The large villages and the high density of population were appropriate only to a victorious military society, relying for at least part of its subsistence on raided crops and beasts produced outside its borders and for the rest on the maximum exploitation of the land inside them. When its enemies had been plundered and its own lands exhausted, it moved on. We can infer from Angus and from Sharpe, who wrote of 'entirely open' country,[144] that within the settled area most of the cultivable land was in use at the same time. Yet in many parts of the Fort Jameson area the soil is now exhausted after five years under maize and must be left for twenty-five years

[141] Angus, 'Northern Angoniland', p. 78; Deare, 'Slave raiders', 27 April and 11 May; Read, 'Tradition', p. 475, f.n. 2; Genthe, 'Mpezeni's', p. 1.
[142] Selby, memorandum dated 10 March 1901.
[143] BS, fo. 329.
[144] Sharpe, 'Lake Nyasa', p. 745. For Angus, see pp. 103*f*.

1:Barnes E-5 (1946-1949) 1954 FR5 Ngoni FR5
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to recover under bush fallow. The long-term carrying capacity of the land before the conquest cannot have been much greater than its present average value of 25 persons to the square mile.[145] Thus it is certain that in pre-conquest times the Ngoni were settled at a density even more in excess of the critical value than it is now, despite alienation. There cannot have been much cultivable land in reserve and the State was exhausting the wealth of its own soil as well as drawing on the resources of its neighbours. Thus even if the large villages had not been burnt, the same number of people could not for long have continued to live in them practising subsistence agriculture. A reduction in the density of population necessarily involved under this economy a reduction in the size of villages, for Ngoni do not like to live more than an hour's walk from their gardens. As it was, the villages were burnt, many Ngoni of Cewa origin left Ngoniland, and much of the more densely settled land, carrying up to 140 persons to the square mile, was alienated to Europeans within six years of the war.[146] The arrangement of persons over the land and the activities they carried on were both dramatically altered by the European conquest. It is, therefore, not surprising that the old society was so drastically changed at the same time. What is perhaps surprising is the extent to which, as we shall see, the forms of grouping of the past have influenced the forms of the new society.

In brief, the old political system was a system of segments, the new one is a system of villages and counties. The county segment links the two systems, but there is no function in the new order for segments embracing several counties or for those that embrace only part of a county. Within the village, the segmentary processes still go on, but at this level of organization we are dealing with kinship rather than politics. When a segment grows beyond the bounds of a single village, it begins to fade away, and we are left with a network of ties which link villages with one another but which do not define mutually exclusive groups as existed in pre-conquest times. The uncertainty about how counties should be divided internally is an indication of the lack of function of these intermediate segments. For some purposes, such as the organization of royal hunts, a county is divided into a number of rural districts. These are geographically defined areas, and it is sometimes possible to say that such-and-such a man, usually a senior lieutenant of the county segment, is the most important person in such-and-such a rural area. However, the recognizable rural districts in a county do not

[145] Allan, *Land Usage*, pp. 16-17.
[146] *N.R.R.G.G.*, ii, 2 (15 March 1904), p. 34.

1:Barnes E-5 (1946-1949) 1954 FR5 Ngoni FR5
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effort to induce them to co-operate actively with the government, and by 1910 he was looking forward to reducing the number of White officials in the Administration by devolving much of the Native work on to the Natives themselves. Co-operation was encouraged by the payment of small stipends to chiefs and others, varying in the 1910s in annual value from £22 10s. 0d. for Mpezeni down to 6s. for district messengers.

The Ngoni for the most part neither supported nor opposed this scheme of administration; they merely accepted it. For years the Administration bemoaned the indifference of the Ngoni, but apart from an attempt by a mission to set up its teachers as headmen, there was little attempt to obstruct the work of the Administration.

In matters of land, the authority of the Whites was also dominant, but here the paternal amiability which characterized purely political relations between Administration and Ngoni was lacking. The alienation of land was at the instigation of the North Charterland, who considered themselves the owners of Ngoni country. Fort Jameson was built by the Administration in the middle of Ngoni country and the land round the township, few facilities though the town then had, became more valuable to potential settlers than more fertile but inaccessible tracts. The high density of population in Ngoni country also attracted settlers with the prospect of an adequate labour supply. Thus we find that many of the first tracts of land alienated were located in the middle of Ngoni country, in the most densely populated section. As early as 1 January 1904 the first Commission was appointed to inquire into land questions in Ngoni country.[18] Now that Ngoni had to grow their own food on land which had already been heavily exploited the density of population fell; but in relation to the carrying capacity of the land in perpetuity there was still serious overcrowding. During the unsettled period of the war and its aftermath, the population was dispersed, but from 1900 down to about 1930, in consequence of alienation and the formation of reserves, villages were gradually brought closer together. From 1930 onwards, with the recognition of land shortage by the Administration, villages have been allowed to spread out again. The negotiations concerning where the Ngoni should live have been protracted and complicated; I hope to discuss them in a later work in connexion with the economic background of Ngoni social life. What is here significant about them is that to a very large extent these negotiations have been carried on entirely by Whites, with the Administration representing for the greater part Ngoni

[18] *N.E.R.G.G.*, 8, 1 (1 January 1904), pp. 30–1.

1:Barnes E-5 (1946-1949)1954 FR5 Ngoni FR5
Mpezeni

631 reserves were amended, and as existing gardens were exhausted.
634 Movement of this kind did not greatly affect political allegiance, so
178 that not all the villages acknowledging the control of a minor chief were built in his vicinity. Coxhead mentions seven defined territorial units in 1914, but by the time I began fieldwork in 1946 their boundaries had been forgotten.[21] Most of the villages in any one county were clustered together, with the capital village and the chief's village somewhere in the middle of the cluster, but there were also more distant villages situated among those belonging to other counties. The next stage of development appears to have been the definition of county boundaries, so that by 1946 it was possible to speak of some villages as situated in one county and owing allegiance to another. Most of these interloping villages, as we may call them, belonged to the segment of the county to which they owed allegiance. They were a bone of contention between chiefs, for although each chief desires as many villages as possible
[311] under his control, he has only a limited amount of land in his county with which to satisfy his people. An analogous situation is found in some Welsh sheep farms, where each farmer likes to own as many sheep as possible but hopes they will graze on someone else's land. The chief in political control of an interloping village endeavoured to maintain his control at a distance and at the same time to make use of the land in the local chief's county, while the latter had to decide between trying to make the interloping village shift its allegiance so as to increase his own following and trying to get it to move away so as to give his people more land. In 1947 and 1948,
[648] to avoid such difficulties between chiefs, the Administration defined county boundaries precisely and insisted that all villages within the area of a county should be under the control of the county chief.

Thus, in the development of the county as a social group, ties
631 of segmentary affiliation have been gradually replaced by those of
634 territorial propinquity. This replacement is not yet complete, nor
648 has it arisen merely as a consequence of Administrative action in
178 the last few years. Village histories show that in many instances a village changed from attachment to the head of its major segment to attachment to the local county chief many years ago and without prompting from the Administration. Villagers marry their neigh-
[582] bours irrespective of county affiliation and thus build up ties which link them to the local county. It may be inconvenient to walk a long way to the court and county meetings of a distant chief, particularly if the local chief appears to listen more readily to his people's complaints and advice.

[21] Coxhead, *Native Tribes*, pp. 22, 24.

1:Barnes E-5 (1946-1949) 1954 FR5 Ngoni FR5
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for a few heaps of stones hidden among the trees on the tops of hills. People visit back and forth freely, except for the control imposed at the customs barrier on the one lorry road. Many people grow vegetables in Nyasaland, where there is more land, and sell them in Northern Rhodesia, where there is a better market.

While this territorial proximity gives rise to a multitude of ties linking individuals across the border, it does not lead to new political relations between the counties with a common boundary. Such political relations as do persist are survivals from the old order. Although the formal structure of the Native Court system, as determined by the Nyasaland and Northern Rhodesia Administrations, does not permit it, cases sometimes come on appeal from the Nyasaland counties to Mpezeni. There is official visiting between chiefs across the border, and when the Paramount Chief is short of food he may ask the Nyasaland chiefs to send him a few baskets of maize. But despite the nearness of the Nyasaland chiefs to Mpezeni in spatial terms, their political interests lie mainly in the opposite direction. They are the only two Ngoni chiefs in that district of Nyasaland and most of the chiefs whom they meet are Cewa. Their Administration is separate from that in Northern Rhodesia, their laws are different, and they look towards Zomba rather than Lusaka as the seat of Administrative power. We have noted how Mpezeni I contemplated moving into Nyasaland in 1897. As late as 1922, when the Native Reserve scheme was under discussion, Mpezeni II made some preliminary soundings on moving across the border, but already by 1946 such projects were overshadowed by the prospects of federation for the two countries of Northern Rhodesia and Nyasaland.

The people of the two Nyasaland counties are subject to the same general influences as are their Northern Rhodesia neighbours in such matters as increasing dependence on an exchange economy and the development of a cognatic or omni-directional kinship system in which links can be traced through spouses as well as through fathers or mothers. Yet even in economic activity there are significant differences. In Nyasaland, Africans grow tobacco for sale, while the Ngoni in Northern Rhodesia are not able to do so; recruiting for the Rand gold-mines is allowed in Nyasaland and prohibited in most of Northern Rhodesia, including the Fort Jameson area.

The annual meetings of the African Provincial Council of the Eastern Province are attended by representatives from each tribe in the province, two people from Fort Jameson township, the Provincial Commissioner and sometimes a representative of the

3: Read E-5 (1935-1939)1960
FR5 Ngoni FR5

rocky outcrops. In September, several weeks before the rains begin, the trees burst out into red foliage, making scarlet rings and patches around the mountains and along the valleys, while through the hard-baked earth spring gladioli and orchids. This is the time of the bush fires when grass is burned and men and boys go hunting. The first rain storms bring a transformation. Fresh green grass covers the land, and scarlet leaves turn bright green on bushes and trees, and later marigolds turn the hillsides golden and yellow arums and red-hot pokers appear along the roadsides.

In making this high plateau their home, the Ngoni chose it primarily for the pasture lands for their cattle. They sited their villages on the ridges or the slopes of the hills, where they had a commanding position, with access to water, good land for cultivation in the shallow dips and river valleys, and woodlands where they could cut poles for their houses and cattle kraals.

The traditional Ngoni village was built in a horse shoe formation round a circular cattle kraal. Larger villages had a central kraal with huts round it, and several other kraals each with its horseshoe grouping of huts. A large village, and there were many of over a hundred huts, seemed at first sight to be a sprawling collection of huts and kraals, with a few tall trees about and several red ant-hills. A pattern of hut sites became apparent, however, once the family and kinship grouping was known. Behind each hut was one or more circular grain stores built on platforms, large ones for maize and smaller ones for millet or ground-nuts. In the Central Ngoni kingdom, and sometimes in the Northern kingdom, there were tall reed fences round the huts of leading families, enclosing an open space where household work went on, and wood and grass were stored.

There were two focal points in each village, reproduced on a minor scale in the hamlets round each kraal. One was the 'big house'[1] at the head of the kraal, where the leading woman had her home.

3: Read E-5 (1935-1939) 1960
FR5 Ngoni FR5

sieves for straining beer or water poured through ashes to make salt. These lay around all day if they were being used, and were periodically scrubbed and put on the rack to dry, and at night stacked tidily in the veranda. In the day-time sleeping-mats of finely woven fibre were brought out into the sun, and so were skins and cloths used as coverings at night. Some of the Ngoni used curved wooden headrests as pillows often carved at the ends with animals' heads to fascinate a small child.

On the polished space in front of the hut were laid from time to time mats on which sprouting millet for making beer was dried, or partly pounded damp maize. A young child was sometimes told to keep the fowls and dogs off these mats. These animals and often small kids, wandered and pecked and scratched and quarrelled inside the fence all day, and young children chased them.

Beyond the fence lay other fenced compounds grouped round the cattle kraal, and beyond the village buildings lay patches of woodland, grass pastures, cultivated 'gardens', and water-holes and streams. Going with the mother or grandmother or a nurse girl or helper to fetch water, or work in the gardens was an expedition for young children which they delighted in.

In these village surroundings there were some places forbidden to young children, who were corrected by everyone with smacks and stern reproofs until they learned to keep away. One such forbidden place was the kraal gateway where the men sat and talked and ate. No woman until she had passed the menopause was allowed to cross over in front of the gateway lest she injure the cattle. If therefore children strayed down there, younger women did not like to go and fetch them back, as the men always grumbled if women went there lest they should harm the cattle. It was nevertheless a place that had a great attraction for boys of five to seven years old, because they found their fathers there and the herd boys. The boys in this age-group of five to seven showed

5: Allan C-5 (1941) 1949 FR5 Ngoni FR5
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low productivity and little power of recovery. Next, the weaker soils will be abandoned: such data as we have suggests that this stage is reached when grain yields fall below 200 lb. per acre in the normal season. The former cultivators of the abandoned land may then offer work in exchange for the food surplus still enjoyed by the holders of the stronger soils, or they may be entitled to a share of the surplus by virtue of kinship obligations. In this way a period of increasing pressure and accelerated erosion on the stronger and more fertile soils is brought about. These stages will commonly be accompanied by migration of able-bodied men to the centres of employment and the stage finally be reached when the area is dependent to a large extent on food purchased from outside sources.

In 1941 a study was made of a highly congested area in Fort Jameson District; the area of Mpezeni, Paramount Chief of the Ngoni. The chieftaincy was found to be 54,000 acres in extent and, after detailed survey, the carrying capacity for traditional Ngoni agriculture was estimated to be about 1,300 to 1,400 persons. A total of 7,700 people, between five and six times the carrying capacity, were supposedly living within the chieftaincy. In short, an area which, because of the high proportion of mountain country, had a critical density of only about 16 persons per square mile did in fact appear to be carrying over 90 to the square mile.

The main reasons for the continued survival of this population were found to be as follows:

(a) The time during which these conditions had existed (about 15 years) was not sufficient to show the full effects of this degree of land pressure.

(b) Great areas of hill country and dambos, which would not normally be cultivated, had been taken into cultivation. The almost incredible mountain cultivation on the Nyamfinzi range was, until recently, a startling spectacle. Use of dambo grassland for *fipoka* gardens had seriously reduced grazing and was a sore point with the cattle-loving Ngoni.

(c) Under extreme pressure the population had burst its bounds and an irresistible tide had inundated adjoining private land and unoccupied European farms. In addition, a missionary organization had permitted cultivation, on payment, on land owned by the mission. By these means the effective acreage had, in fact, been increased by almost 50 per cent.

(d) A very heavy burden had been thrown on the limited soils of high fertility and resistance to erosion, the only soils left in the original area still carrying moderately good crops. These soils, then in continuous cultivation, were feeding more than twice as many people as they would normally do.

(e) The Paramount Chief was importing from Nyasaland each year a considerable quantity of food for the use of his people.

5: Allan C-5 (1941)1949 FR5 Ngoni FR5
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The people in the original area were short of food but by no means at starvation level. This was ascertained by taking seven sample villages at random within the congested area and weighing their entire food stocks during the first fortnight of February. From these samples the following data were obtained.

Grain Stocks of Seven Ngoni Villages

(February 1941)

Total population			Total grain stocks
Men	Women	Children	lb.
292	389	531	24,710

Making no allowance for a special reserve of seed against a possible need for replanting, or for loss in preparing flour and for other reasons, the grain stock represents not more than 20 days usage, and supplies would probably be exhausted by early March. There was much variation between villages; one exceptional village had enough grain for 46 days while in another the grain stocks represented only 4 days supply. It will be remembered, however, that in an African social system, kinship obligations tend to even out the distribution of food supplies.

In striking contrast to these samples, a village which had recently made an illicit move to unoccupied private land was found to have, at the end of February, grain stocks representing 81 days supply. The effects of falling yields first make themselves felt in the bad years and it should be noted that the sampling was done in a year following a good climatic season. It will also be noted that villages which would in all probability have reached the starvation level had already transferred themselves.

There is, then, a time lag between the beginning of over-crowded conditions and the point at which obvious symptoms of land degeneration and soil erosion appear. The length of this time lag clearly depends on a number of factors acting together; the type of land and the system used on it, the degree of congestion, the original population density and the rate of population increase, if any. A further variable time lag elapses before conditions of general food shortage are reached. Under some conditions the process of land degradation may result in food shortage within a very few years, while in other cases this result may not appear for twenty years or more.

Within ten years of the creation of reserves in the Mkushi District obvious land degradation and recurrent food shortages in some areas had reached such a stage as to attract the attention of District Officers, missionaries and other interested persons, and to create an insistent demand for additional land. The population densities in these areas were 18 to 25 persons per square mile. Other areas of the Territory, notably the reserves of the

5: Allan C-5 (1941) 1949 FR5 Ngoni FR5
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Other areas of the Territory, notably the reserves of the Northern and Eastern Provinces, provide similar examples for different systems and land categories. In the second Report of the Ecological Survey (North Eastern Rhodesia, paras. 316–20) Trapnell records a wide range of observations on areas where land degeneration and soil erosion had become marked, in relation to land categories, population densities and the time factor. These observations provide independent evidence of the relatively low carrying capacity of much of our land under the traditional systems, and they accord well with the estimates obtained by the methods outlined in this paper.

161 311 311 [114] [128]

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5: Allan C-5 (1941) 1949 FR5 Ngoni FR5 ●
Mpezeni
Maravi FR4
Lamba FQ8

PART IV

THE RESETTLEMENT OF NATIVE POPULATIONS IN NORTHERN RHODESIA

§ 1. *The Problem and its Origin*

IN Northern Rhodesia and doubtless over a much greater part of Africa before the coming of the Europeans, the population-land pattern was a changing, kaleidoscopic picture. If an area became overcrowded more land was available, or it could be taken from a neighbouring people. A rough balance between land and population was maintained by means of migration, inter-tribal wars, periodic famine and disease.

With the coming of the European the kaleidoscopic picture was arrested, producing what we may call the primary population-land pattern. This was later modified, by alienation and reservation of land and by the movement of peoples into Native reserves, to produce a secondary pattern. New economic factors have so far modified this secondary pattern only to a minor extent, but it may be expected that they will tend to do so increasingly in the future.

The secondary population-land pattern was brought about mainly by the movement of the African population into Native reserves. As a result of this movement large areas of Crown Land were left practically uninhabited, and a number of factors operating together brought about mal-distribution and congestion of populations within the reserves themselves.

So far the problem has been studied in detail only in the Fort Jameson and Petauke Districts of the Eastern Province, the Mkushi District of the Central Province and the Ndola District of the Western Province, and it is within these districts that resettlement work—other than the 'Chitemene Control' scheme—has been carried out. The four districts are contiguous and the total area within them to which this discussion refers is about 33,800 square miles (4,000 square miles more than the whole land area of Scotland but only about one-ninth of the area of Northern Rhodesia) with a total population, in round figures, of 290,000 (about one-sixth of the total populaton of the Territory).

The primary population-land pattern was such that the ten tribes living within this area had ample or much more than ample land, except to a minor extent in the Fort Jameson District where the incursion of the immigrant Ngoni in the later 19th century had created a potential congestion problem. Under former conditions this problem would doubtless have resolved itself as it arose by migration of the Chewa to north and west, under pressure from the Ngoni, but once the kaleidoscopic pattern was arrested no such

5: Allan C-5 (1941)1949 FR5 Ngoni FR5
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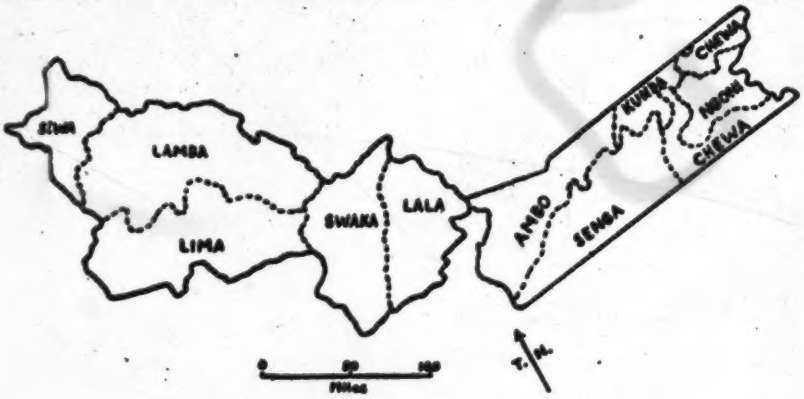

Fig 1.— THE ORIGINAL POPULATION-LAND PATTERN
Showing areas held by tribes.

movement was possible. The lands of the Ngoni and Chewa were then reduced, by alienation to European settlers and by reservation, to an extent which the following figures illustrate :

Habitable Land held by Tribes (square miles)

	Chewa	*Ngoni* *
Before Ngoni invasion	3,580	–
After Ngoni invasion	2,280	1,300
After land alienation	1,124	878
After creation of reserves	889	675

Throughout the Petauke and Mkushi Districts the amount of land taken up by European settlers was negligible, but the Senga, Ambo, Lala and Swaka peoples were moved into Reserves some of which proved totally inadequate for the land needs of their traditional agricultural systems.

In the west (Ndola District) the congestion problem arose largely as a result of displacement of people from the area which is now the Copperbelt of Northern Rhodesia, a land loss which fell on the Lamba tribe. The land area of Mushiri's section of the Lamba, for example, which formerly included part of the Copperbelt, was reduced from 2,200 to 360 square miles. The Lamba were removed from the new mining areas and this movement accentuated by some migration of more distant peoples attracted by the mines, gave rise to a belt of relatively high population concentration about the southern and eastern margins of the Copperbelt.

* With a mixture of Chewa and other tribes.

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In demarcating the Reserves three assumptions were made; that populations would prove sufficiently fluid to adapt themselves to the altered circumstances and to attain an equitable distribution in relation to the available land, that artificial water supplies would be provided on a scale sufficient to allow of such a distribution and that improvement in methods of agriculture would be sufficiently rapid to compensate for land loss and to provide for increasing populations. However reasonable these assumptions may have been at the time, none has been verified by events. The boundaries of tribes and chieftaincies remained static, there was little or no migration from over-populated to under-populated areas and in one instance congestion was aggravated by immigration from outside the Territory. The systems of land usage tended to degenerate rather than to improve, partly owing to increasing pressure on the land and partly because of migration of the men to the centres of employment. It was assumed too that adequate agricultural and water development services would be provided, and it proved beyond the resources of the country to provide such services in time to meet the need.

As a result of these factors, some of which could not have been foreseen owing to the lack of adequate data at the time, and some of which, like the economic depression and its effect on territorial finances, were unpredictable, extreme maldistribution arose in some parts of the Reserves. By 1941 more than half of the people within the Native Reserves of the four districts were living under conditions of more or less acute land shortage in relation to the land needs of their traditional sytems, and very considerable areas were in process of rapid degeneration.

There is now little point in discussing whether or not the application of measures for agricultural improvement could have solved the problems of over-concentration without transfer of populations. In all probability no measure which would have been practicable could have met the case. The agriculture of a people can be rapidly developed only if three factors are present together; the means, the incentive and the will. Throughout the area we are discussing these factors were and for that matter still are, to a large extent absent. Except for local concentrations of cattle among the Ngoni, Chewa and eastern Senga, stock are lacking or negligible in numbers. The only implements are the hoe and the axe. A high proportion of the able bodied men are away at work, and the main source of income is from local employment by Europeans or the fraction of the wages of migrant labour which returns to the villages. With one or two local exceptions there are no cash crops sufficiently remunerative to compete with the attraction of the labour centres or to act as an incentive and provide the means for agricultural improvement. Nor was there any will to adopt new, incomprehensible and laborious methods while great areas of land, formerly in the possession of the people, remained empty and unused. This psychological factor alone would have defeated, and where it was attempted did defeat, all efforts at agricultural improvement. In addition, throughout most of the cattle areas of the Eastern Province population concentrations had reached such a level that even the immediate general adoption of an advanced system

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of mixed farming would not have solved the problem without the transfer of a considerable proportion of the people.

§. 2. *Recommendations of the Land Commission*

In 1941 a large part of the land held by the North Charterland Exploration Company in the Fort Jameson and Petauke Districts was acquired by Government, and in 1942 a Land Commission was appointed which included in its terms of reference the making of 'full provision for the agricultural requirements of the Natives'. This Commission recommended that some 5,600 square miles of unalienated Crown Land in the Fort Jameson and Petauke Districts, about 2,000 square miles in the Mkushi District and 4,800 square miles in the Ndola District, should be constituted Native Trust Land and made available for Native occupation.

§ 3. *The Problem of Resettlement*

The problem then resolved itself into making the best possible use of the additional land, and using it in such a way as to restore the population-land balance where this could be done. It was not, of course, possible, even if it had been desirable, to recreate the primary population-land pattern, but the grant of additional land gave an opportunity of creating a planned tertiary pattern to replace the arbitrary secondary pattern.

Such planning requires a detailed knowledge of the land and of the agricultural systems employed on it. Fortunately the basic knowledge had already been provided by the Ecological Survey of the Territory. The vegetation-soil method, evolved by Trapnell, provided a rapid and reliable means of land classification and, again on the basis of the work of the survey, a method of estimating approximate land carrying capacities for traditional African systems of usage was devised. Description of the vegetation-soil method of land classification will be found in the two reports of the Ecological Survey and notes on the factors involved in the estimation of land carrying capacities are given in the second of these reports.*

A complete description of the method of estimating land carrying capacities, as employed in the resettlement work, and examples of its application are given in the other papers in this series.

It is necessary to understand clearly what is meant by the terms 'land carrying capacity' and 'population-land balance', as they are used here. There is a very definite limit to the number of people any land area will support in perpetuity, if the population obtains its food only from within that area. This limit is fixed by certain natural characteristics of soil and

* *The Soils, Vegetation and Agricultural Systems of North Western Rhodesia*, Lusaka: Government Printer, 15s. *The Soil, Vegetation and Agricultural Systems of North Eastern Rhodesia*, Lusaka: Government Printer, 5s.

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Crown land, Company land, alienated land and unoccupied Native Reserve. Largely uninhabited.

Land in Native occupation. Largely under-populated.

Land in Native occupation. Over-populated.

Fig 2.— THE SECONDARY POPULATION-LAND PATTERN.

Trust Land for future use of African peoples, Crown lands and alienated land.

Land in Native occupation. Balanced or under-populated.

Remaining areas of over-population, capable of supporting their populations on the basis of improved agriculture.

Fig. 3.— THE POPULATION-LAND PATTERN AFTER RESETTLEMENT.

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climate and by the way in which the land is used. If the limit is exceeded *without a compensating change in the system of land usage* then a process of land degradation is set in operation and ultimately, unless food is obtained from outside the area, population must decline to the limit determined by natural conditions and the system of land use, or to a lower level. This limit, the maximum number of people that a given land area will maintain in perpetuity under a certain system of land usage, has been termed the 'carrying capacity' of the area *for that system*. It will be clear that the term can be used only in relation to a clearly defined system of land usage. Throughout these notes, when no statement to the contrary is made, the expression is used in relation to the traditional agricultural system of the tribes concerned. These systems, and the staple crops which go with them, vary greatly within this relatively small area of 33,800 square miles, and range from a primitive form of axe-agriculture among the Western Lala to comparatively advanced soil selection methods practised by the Eastern tribes. Descriptions of all of these systems will be found in the publications to which reference has already been made.

The term 'population-land balance' hardly requires definition. If the total population of an area is equal to or less than the land capacity for the system of agriculture practised, then a population-land balance exists within that area. When the total population is well below the land carrying capacity the areas may be described as under-populated.

These concepts, and the methods of survey and of estimating the carrying capacities for the different land categories and agricultural systems, were applied to the problem of resettlement. Rapid reconnaissance surveys were made throughout the populated areas, with the objects of assessing approximately the land carrying capacity for each chief's area and estimating the number of people who would have to be moved to unoccupied land in order to re-establish a population-land balance on the basis of the traditional agricultural systems. The estimate indicated that a total of about 160,800 people would have to be moved, as shown in the Table below.

District	*Tribe*	*Number of people to be moved*
Fort Jameson	Chewa	98,300
	Ngoni	
Petauke	Senga	35,000
	Ambo	8,000
Mkushi	Lala	3,200
	Swaka	4,300
Ndola	Lamba	12,000

The estimates make no allowances for the readjustment of population distribution within the old Reserves. Some chieftaincies were in fact much under-populated and in some of the Reserves considerable areas remained almost or completely uninhabited because of water shortage, the occur-

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rence of sleeping sickness or for other easons. It would have been possible by re-distribution of populations within the old Reserves, in conjunction with provision of water supplies and measures against 'fly', materially to reduce the number of people to be moved to unoccupied land. Such a course would have involved serious plitical repercussions and, in view of the amount of land available, it was never contemplated.

The next essential step was to surveythe vacant land available for resettlement, to prepare vegetation-soil mapsof the areas, and to estimate the carrying capacity of each area for the tradiional agricultural system of the people who would occupy it. In the Eastern Povince and the Ndola District surveys were made on the basis of parallel stright line traverses, using liquid prismatic compasses and cyclometer whels. Traverse lines were usually one mile apart, but wider intervals up to tree miles were used, in order to save time, if the country was relatively uniform or if no high degree of accuracy was required. In some instances, whn very accurate maps were wanted, the traverse interval was reduced to oe half or one quarter of a mile. Information on water supplies, the stateof regeneration of land and timber, the former inhabitants and other relevnt details, was collected in the course of these surveys. In the case of Mkush District, where there was an abundance of available land in relation to he needs of the population, sample traverses only were used. The methodof survey and mapping are described in one of the other papers in this serie.

When estimates had been made ofthe number of people to be moved from each of the over-crowded chiefdincies and the carrying capacity of the available land, divided into convenent areas, had been ascertained, the planning of population movements becme, in theory, simple. In practice, of course, there were a good many difficulties.

Tribal boundaries and the original ownership of the land had to be taken into consideration, though these wer not regarded as sacrosanct and, in fact, a large area formerly occupied bythe Senga was used for the resettlement of a section of the Chewa. Other factors also limit movement. There is, obviously, a physical limit; fifty miles was regarded as the maximum practical move, but in extreme cases villages were moved as much as seventy miles. Traditional systems of land usuage are, generally, adaptations to particular sets of ecological conditions and people cannot be moved into an environment unsuited to their food crops and method of production. Cattle-owning people will not willingly move to tsetse country leaving their herds behind.

Water supplies proved to be a very great difficulty over large areas, especially in the Eastern Province. Natural supplies were not sufficient to allow of full utilization of the land on the basis of its carrying capacity, and in some cases practically no settlement was possible before artificial watering points had been provided. It appeared that, in the Eastern Province at least, permanent surface water had greatly diminished in the twelve to twenty years during which the land had lain unoccupied. The old sites of villages and their sources of water supply were noted in the course of the

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surveys. In an astonishing number of cases these sites were in completely waterless country and what were stated to have been permanent streams, pools and springs had dried up. The fierce late fires which swept through the empty country each year may have been a major cause of the dessication.

§ 4. *Roads and Watering Points*

After survey had been completed and before movement into an area started, roads (generally earth tracks twelve feet wide) were constructed. These were essential in order to facilitate movements of people and their food-stocks and goods, to enable subsequent supervision and to allow of the construction of watering-points. The preliminary surveys and the maps constructed from them were invaluable in planning the road systems in relation to topography and soils, so that they would be passable throughout the year.

Wherever necessary plans were prepared in advance, also on the basis of the preliminary surveys, to provide sufficient water for the number of people to be moved into each area, and the work of constructing water points was undertaken by the Water Development Department. Water was usually provided by means of dug wells (25 to 100 feet in depth), occasionally supplemented by bore-holes, but in some areas wells were unsuccessful and earth dams were constructed. In one locality, the Mushiri resettlement area of Ndola, a particularly favourable site was used to make a large central dam which was stocked with bream (*Tilapia spp.*) in the hope of producing a fish supply for the surrounding villages. A large scale water programme was undertaken, and is still in progress, in the Eastern Province and a minor programme of some thirty wells has been completed in Ndola District where natural supplies are very much better.

§ 5. *Game and Tsetse Control*

Another difficulty was the occurance of destructive game in unoccupied country. Villages commonly objected to movement on the grounds that elephant and wild pigs would destroy the crops, an objection which often contained a good deal of substance.

Reduction of destructive game was carried out, as far as ammunition supplies and trained African staff would allow, by the Department of Game and Tsetse Control.

In the northern part of Fort Jameson Districts, where a few cases of sleeping sickness appeared among villages moved into a 'fly' area, a campaign of game elimination was undertaken by the Department in conjunction with the clearing of 'hard pan' (pockets of *Albizzia Harveyi* on compacting pedocal soils, generally near watercourses). These measures appear to be giving very satisfactory and rapid results and the fly has been much reduced or eliminated in areas where it was formerly abundant.

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Other parts of the Eastern Province resettlement areas are also 'fly' country, but apparently free from sleeping sickness and it is only in the northern zone that intensive measures against tsetse have been carried out so far. The large available land area in Mkushi enabled the relatively small 'fly' areas to be avoided. This was fortunate as sleeping sickness is believed to be endemic in the western 'fly' areas of Mkushi.

The resettlement area of Ndola District was believed to contain sparse 'fly' in local pockets. Trials were made by the Agricultural and Veterinary Departments in co-operation by placing herds of cattle throughout the area and grazing them within a definite range about the kraals. Ten herds each of five beasts were used; the animals were numbered and blood slides were taken from each at frequent intervals. As a result of these trials it was found that almost the whole area was free of trypanosomyaisis and suitable for stock raising, and the small areas of 'fly' infestation were defined.

§ 6. *Method of Settlement*

Areas for resettlement were allocated to each tribe and chieftaincy in accordance with the general plan to restore the population-land balance as far as possible. Movement was, in theory at least, entirely voluntary but in many cases a good deal of persuasion was necessary to obtain the necessary number of villages. Most villages naturally preferred that their neighbour should move and that they should take over the vacated land rather than go to the trouble of moving. District Officers and Agricultural Officers held preliminary discussions with the people and the question of the villages to move into the resettlement areas was settled with the co-operation of the Native Authorities. Population counts of these villages were made, usually by District Officers.

Headmen and other representatives of the villagers who had finally elected to move then toured the area allocated to them and selected sites for the new villages. The headmen and the villagers almost invariably arranged this matter among themselves without any difficulty whatsoever. The selected sites were then marked on the Vegetation-Soil Map. Blocks of land having an estimated carrying capacity approximating to the total villages population, allowing for temporary absentees, were demarcated around the selected sites, using roads, streams, hills and cut or blazed lines as boundaries. Estimates of land carrying capacity were, of course, based on the traditional agriculture of the people concerned. This allocation of land areas for individual villages proved universally popular; the people are jealous of their boundaries and, apparently, willing to maintain them. They have usually built permanent stone beacons, to replace temporary timber structures, where the boundaries are not clearly defined by natural features.

This general method of controlled settlement was not individually applied or always possible. The great escarpment area of the Eastern Province,

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The great escarpment area of the Eastern Province, much of it inaccessible and uninhabitable, except for small pockets of fertile soil, was opened to unrestricted settlement by the Ambo and Senga-Kunda peoples. Other areas of poor soils and low carrying capacities in Fort Jameson District were also opened to free settlement up to a population total determined by the carrying capacity.

In Ndola District an area was opened to immediate uncontrolled settlement, in order to relieve acute land shortage and actual starvation in one section of the Reserve.

A somewhat modified method has been used in parts of Petauke District where dams are the only means of providing water. Here the population unit consists of three or four villages grouped into a 'parish' and settled about the watering points. A single land area is demarcated for each of these groups, instead of allocating a separate block to each village. This method allows of economy in the distribution of watering points, tends to reduce the effect of inter-village movements and, it is hoped, will lead to larger administrative units.

§ 7. *Agricultural Control and Improvement*

The general object of resettlement is to re-establish a population-land balance on the basis of traditional land usage *and the present population numbers*. Obviously, this balance cannot be permanent if the population is increasing; and if it is not increasing something is seriously wrong. Reliable vital statistics are entirely lacking but probably most of the tribes are increasing (the Ngoni may be an exception) at a rate which, judging by the very few available data, may be about 1½ per cent per annum, a rate which would double the population in forty-six years.

Resettlement is not, and was never regarded as, a substitute for agricultural improvement. The objects are to reduce the agricultural problem to practicable proportions, to relieve acute land shortage, to give time for experiment and the introduction of new methods. The assumption is that an evolutionary process of agricultural improvement will keep pace with natural increase of population, and that this process must be guided by experiment.

Simple measures of agricultural control, and the beginnings of soil conservation and agricultural improvement, have been introduced in each of the resettlement areas as a condition of occupation. It need hardly be said that these are not popular with the majority and the existence of such conditions is a deterrent to movement.

In the case of the earlier settlements in the Fort Jameson District an elementary system of soil conservation was introduced by demarcating the land for cultivation in contour strips separated by untouched belts of grass (which acquired the name of 'ten-yardis' since the original strips were ten paces wide). This was followed by an attempt to replace the traditional mound system of Ngoni, Chewa and Senga by cultivation on ridges

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to plant a small number of trees (four per hut is the general rule). Seeds, seedlings and cuttings of mango, mulberry, lemon, guava, pawpaw and banana are distributed free from Departmental and Native Authority nurseries. The trees are planted within or about the sites of the new villages and the people are on the whole willing enough to plant them but show little inclination to care for them once they have been planted. Losses from drought and damage from fowls and small stocks are fairly heavy and in the Western Province two severe winters in succession have frosted off a number of young plantations. It is still uncertain whether this attempt to establish village orchards will be successful.

The only other general restrictions on land use are the prohibition of cultivation within demarcated areas and of late burning of grass and bush. In all village blocks non-cultivation areas have been demarcated for the preservation of streamsides and steep slopes. Areas have also been demarcated as Forest Reserves for future timber supplies and for the protection of watersheds, and in some cases land which is not required for present use has been reserved against the future needs of a growing population. Late burning of grass and bush is prohibited and the responsibility for early burning of the village blocks is placed upon the headman concerned. These prohibitions are enforced by Native Authority Rules.

§ 8. *Housing*

In most of the resettlement areas an attempt has been made to improve the standard of housing and the layout of villages and on the whole this has been fairly successful. When the permanent site has been selected (sometimes a lengthy business involving consultation with the ancestral spirits) the lay-out of the village is planned and the situation of each building marked out by an African Assistant. The people are persuaded to adopt a somewhat higher standard of building, but no compulsion is used and they have generally been willing enough to do so if the standards required are not too high. The standard of housing and village lay-out is certainly an improvement, if not a very great one, on the standard within the Reserves.

In the Western Province a number of model villages have been built of Kimberley brick. These were built by the villagers themselves, with the assistance of a small team of skilled builders and thatchers employed by the Administration. The object was to stimulate a desire for better housing and it seems to have done so in some degree since most of the other villages have now volunteered to become 'models'.

§ 9. *Assisted Movements*

The movement of a village for a comparatively short distance, a day's journey of fifteen miles or so does not present any particular difficulty and the African has long been used to such movements. If it is impossible

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to clear large enough gardens at the new site in the first year a part of the old gardens can be used, for it is easy to travel back and forward between the old and new villages. The majority of the moves were of this order and no assistance was required or given. In the case of longer moves, heavy household goods and food stocks were transported by motor lorry, or in some instances when it was convenient to do so the entire grain stock was bought at the old village and food, purchased locally, was sold at the new site. This enabled the people to give the whole of their time to preparing a large garden acreage in the first year. The great majority of villages moving for moderate or long distances (twenty five to seventy miles) succeeded in preparing large enough gardens and growing sufficient food for themselves in the first year. A few did not, for one reason or another, such as starting too late, a bad season or just plain laziness, and these villages were supplied with food in the first season either in return for work or on promise of repayment after a good harvest. Less than 5 per cent of villages received such relief.

§ 10. *The Progress of Resettlement*

It was estimated that, in order to restore a complete population-land balance, about 141,300 people would have to be moved from the Reserves of the Fort Jameson and Petauke Districts. No such movement was, in fact, possible. The total carrying capacity of the land available for resettlement which contained a vast mass of escarpment hills and other large areas of almost useless land, was estimated to be 78,000 people. This land was, of necessity, allocated to the tribal groups in the following way:

Ngoni and Chewa	:	Sufficient land	for	35,000 people
Senga	:	"	"	35,000 "
Ambo	:	"	"	8,000 "

Thus in the case of the Ngoni and Chewa the available land was totally insufficient to allow of the restoration of a population-land balance, while in the case of the other peoples such a balance could be achieved.

Two alternatives were possible; to re-distribute the Ngoni and Chewa populations more or less evenly over the new land and the Reserves, in which case both would be over-populated in relation to their carrying capacities, or to populate the new land to the maximum of its carrying capacity, leaving the Reserves still over-populated. The latter course was adopted for a variety of reasons, including the fact that much of the new land was tsetse infested and the keeping of cattle and development of mixed farming would not be possible at least for a very considerable time. The Reserves, on the other hand, carried many cattle and, with reduction of the population by resettlement, would be able to support their populations on a basis of mixed farming.

Movement was therefore designed to populate the new areas to the maximum of their carrying capacity and to reduce the agricultural problem

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of the Reserves to manageable proportions, leaving an excess of population, but not too great an excess, within the cattle areas.

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In Petauke District, where there is ample land available, the object aimed at is a complete restoration of the population-land balance by controlled movement of some 35,000 Senga and uncontrolled movement of 8,000 Ambo and Senga-Kunda.

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Survey work in the Eastern Province started in 1941 and a few pioneer villages were moved in that year, but the main movement started in 1942 (when over 18,000 people were moved) and it is still in progress. By the end of 1945 the programme was more than half completed; 292 villages (about 32,000 people) had been moved into controlled 'village blocks' or 'parish settlements' in addition to uncontrolled or partially controlled movements in the escarpment area and parts of the Fort Jameson District. The comparatively slow rate of progress is due to water-shortage. Large areas in Petauke District and the north of Fort Jameson have not yet been settled for this reason, while in the latter area there is also some danger of sleeping sickness, and measures for the control of 'fly' (game destruction and clearing of 'hard pan') are in progress. Settlement is continuing at the rate set by provision of water supplies and the control of tsetse.

L M N [312] [136]

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The Mkushi District presents an entirely different picture since the available land is about twice as much as the present population require, on the basis of their traditional agricultural practice. Here, instead of village blocks, comparatively large areas have been demarcated to take a number of villages and there is no strict control. The Superior Native Authority has introduced rules intended to bring about a gradual conversion from small circle *chitemene* (a primitive form of axe-agriculture) to hoe cultivation of kaffir corn with subsidiary gardens for a variety of crops.

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The land not actually required for immediate use has not been allocated but is being held in reserve against the future needs of the African people and the Native Authorities undertake responsibility for early burning within the reserved land.

The bulk of the necessary population transfers have already been carried out.

In Ndola District also the available land is considerably greater than present needs and some is being held in reserve. Populations moved from the congested zone about the mines have been settled in village blocks and, apart from an area demarcated for immediate settlement in 1943 to relieve actual starvation, there is no uncontrolled settlement.

Movement of 120 villages, having a total estimated population of 11,775, was completed in 1945. It has since been found, however, that the population counts made by a District Officer seconded for the purpose are in fact over-estimated and a considerable number of the blocks are under-populated and further movements may be necessary.

10: Barnes E-5 (1946-1949) 1959
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replaced by new ones, but the village as a whole may be regarded as stationary. The exhaustion of garden land in the vicinity of the village is the principal reason for moving, as with the passage of time a man has to go further and further from the village to find new land. Sooner or later it becomes more convenient to move the village to another locality where there is plenty of regenerated land on which gardens can be made. The death of the headman is sometimes followed by a move to a new site, while quarrels within a village may cause a portion of the inhabitants to go off and live on their own, usually after the matter has been referred to the chief. Since 1898 many villages have been moved off land alienated to Whites, or away from congested areas.

When the Administration is the instigator of the move, the new village site is a matter for discussion between District Officer, county chief, and village headmen. In moves made on the initiative of the villagers, the various possible new sites are reconnoitred by the headman and other important people in the village and the site chosen is notified to the chief for his approval. The first people start to make their gardens in the vicinity of the site, and work is started on the new village. For this a recently abandoned garden site may be chosen, as it is easier to clear. The first structure to be built is usually a cattle byre. Making a byre is very hard work, and I was told that if it was left till later it would be difficult to get people to tackle the job. Rattray, writing of Gomani's Ngoni of central Nyasaland, relates how the headman's hut is built before the others, but this custom appears to be unknown in Fort Jameson District.[1]

Building is begun by the more industrious before the rains end, and is completed after the harvest. The transition from the old site to the new one is gradual, as, unless the distance between the sites is too great, people will continue working the gardens in the old area until they are exhausted. New gardens are indeed opened up on the old site of the village, and it is quite common to see the ground dug up between the huts at the end of the rains while there are people still living there.

[1] Rattray, *Folk-Lore Stories*, pp. 109–11. Fraser, *Winning a Primitive People*, pp. 103–5, gives an account of the building of a new village among Mombera's Ngoni of northern Nyasaland, in which the cattle byre was built first, but it must be remembered that this was a village built round a central byre, after the fashion of the South-Eastern Bantu, whereas the cattle byre in a Fort Jameson village is nowadays a smaller affair placed on the outskirts of the village.

10: Barnes E-5 (1946-1949) 1959
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361 Huts sometimes become infested with ticks, or the site itself may prove to be intolerably damp. New huts are then built a short distance away or even contiguously to the old site, and no new gardens are made apart from those made among the deserted huts.

Internal Segmentation of the Village

361 621 We have already seen that the divisions within the village are embryonic new villages. These divisions are most formally indicated in the Nyasaland counties, where there are large villages divided into a distinct number of divisions, with the spatial boundaries between the divisions indicated by a greater interval between the huts, and with each division named and under the charge of a lieutenant or of a patrilineal kinsman of the headman. On the Rhodesian side, however, it is more usual to find that certain small clusters of huts within a village are regarded as being the division of such-and-such a person living in one of them. The bulk of the huts in the village do not belong to any particular cluster but merely to the village as a whole. These clusters do not have any name apart from that of their senior inhabitant, whose close relatives occupy the huts of the cluster. The leader of a cluster may be a lieutenant of the headman or merely some important person with a comparatively large body of dependants. Such clusters, which are often on the periphery of the village, sometimes originate from the grouping together by a polygynist of the huts of his various wives, and grow as their children marry and live alongside their parents. Another mechanism for the formation of clusters is that [166] of immigration into the village at about the same time by a number of persons related to each other more closely than to the other inhabitants of the village, as, for example, on the break-up of some other village. The immigrants tend to build together if there is room. In this case the leader of the cluster may have little standing in the village. The boundaries of clusters are not always plainly indicated, while a man who is ambitious to make his own village may as a first step try to increase the clarity with which his cluster is defined spatially.

Land Utilization

●311 241 We may divide gardens into three types: main, old village, and moist. The moist gardens are made near streams, and are fenced to keep out cattle. Tomatoes, cabbages, onions, and other vegetables are grown, and maize is planted during the hot season so that it can be harvested in December or January. These gardens are cultivated only by the

10: Barnes E-5 (1946-1949) 1959
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more industrious and usually with a view to sale of vegetables in Fort Jameson. The sites last for many years and are usually abandoned because of the removal of the owner's village to a distant place rather than because of exhaustion of the soil. 311 ● 241

Old-village gardens are made on the site of former huts and byres, in order to take advantage of the high fertility of the soil. These gardens are not usually fenced, except when they are made on the outskirts of some existing village on the site of an old byre. Tobacco is sometimes grown, but for the most part they are cultivated in the same way as are main gardens. The site belongs to the former owner of the hut or byre, so long as the garden continues to be worked. [423]

Main gardens are made from bush clearings, and are chosen with some regard to the type and quantity of the natural vegetation. Land that has been abandoned for long enough, say twenty-five years, regains its natural cover, and if the ownership of former gardens has been forgotten, it is treated as though it were virgin woodland, that is, it is permissible for anyone who wishes to come and cultivate it. A new village site is chosen to be near, if possible, an ample amount of such regenerated land, and at the first selection of gardens the headman of the village may go round the area and see where the new gardens are being made. Gardens tend to be within 2 miles of the village, but there is no one definite area that is associated with a particular village, so that if there are a number of villages in proximity, the gardens of their inhabitants will be intermingled. A man exercises a lien on the area of uncleared land round his garden, and may take up this land himself as he enlarges his garden. Hence at first there are considerable belts of bush left between one garden and the next. With the passage of time, these are cleared, and gardens become contiguous, with boundaries between them that are almost imperceptible at first glance. At the same time as enlargements are made, the least productive parts of the gardens are neglected, so that, as the years go by, the area cultivated by one man may gradually change its position, and fresh areas of resting-land will appear between the gardens. Main gardens vary in size from about 1 to 3 acres. [423] [961] [425]

If a man moves into a village and wishes to start a garden, he is usually given part of the garden of the person to whom he is attached in the village. A son returning from the mines may be given part of his father's garden. Conversely when someone leaves the village, his garden passes to his relatives. In particular, when a man dies, his 423

10: Barnes E-5 (1946-1949) 1959
FR5 Ngoni FR5
Mpezeni

IV. WIDER CONTACTS

Other Local Groups

We have so far in this account been concerned with delineating the main outlines of political and village structure and the kinship system. We have examined the internal constitution of the tribe and have only been concerned secondarily with the external relationships by which the Ngoni are connected with the wider world. But in the Fort Jameson District there are, and have been for many years, people who do not fall within the tribal framework but with whom the Ngoni interact. These include people from the British Isles and South Africa, Indians, and Coloured persons, as well as Africans from other tribes. The Europeans are there as administrators, missionaries, farmers, and traders. Indians are traders and farmers, while Coloured persons are farmers and foremen. Africans from other tribes are, like the Ngoni, labourers on the farms and in the township, as well as subsistence cultivators in their own tribal areas.

The land of the District is divided into Native Reserve and Trust land, farm-land, township, and Crown land. Almost all Ngoni villages lie on Reserve or Trust land, and it is in this zone that most of the activities described so far take place. On the farm-land Ngoni participate not as headmen or lieutenants or chiefs, but as labourers and foremen. They still fill the roles of husband, wife, sibling, parent, and child, and sometimes other kinship positions, but the family in the farm compound is on a smaller scale than in the village. In the town of Fort Jameson the range of activity open to them is greater, and there are Ngoni butchers, drivers, clerks, shop assistants, Native Urban Court assessors, and so on. All these roles on farm and in the town are shared with Africans from other tribes in the Eastern Province and from more distant regions.

The Churches

The influence of the non-African groups extends out beyond the areas in which they live into the reserves. We have already seen how the Administration has affected the life of the tribe. The Christian Church has also had a profound influence. By 1910 there were three denominations at work in Ngoni country: the Dutch Reformed Church Mission,[1] the White Fathers,[2] and the Universities' Mission to

[1] Algemeene Zending Commissie der Nederduitsche Gereformeerde Kerk in den Oranje Vrijstaat.

[2] Société des Missionnaires de Notre Dame d'Afrique, a Catholic Order.